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ABSTRACT

Population growth rates in the 1950-1975 period indicate that metropolitan and nonmetropolitan streams of migration are of virtually the same magnitude in Wisconsin; metropolitan residents are moving to nonmetropolitan places as frequently as their nonmetropolitan counterparts are migrating to metropolitan communities. When migration streams are decomposed by sex, age, rural-urban residence, employment status, education, occupation and income, other implications of shifts in population can be assessed. Sex ratios do not differ significantly, but young adults are more migratory than any other age group in the population. Migration to urban places peaks at ages 15 to 24 whereas migration to rural areas peaks later at ages 25-34. This pattern suggests that young migrants seeking jobs, education, and marriage partners prefer living in urban areas, while those older are more likely to choose a rural residence, perhaps because of perceived advantages in the rural life for raising children. Rural to urban migrants are closer to native urbanites in education, occupational skills, income and employability than to the rural residents they left. Using data from the U.S. census, this study examines the volume and composition of metropolitan and nonmetropolitan migration in Wisconsin. Tabular data is used to reflect study findings regarding the direction of the migration streams, interstate migrant status, and compositional characteristics of the migrant streams. (DS)

Metropolitan and Nonmetropolitan Migration Streams in Wisconsin 1965-1970

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EDUCATION

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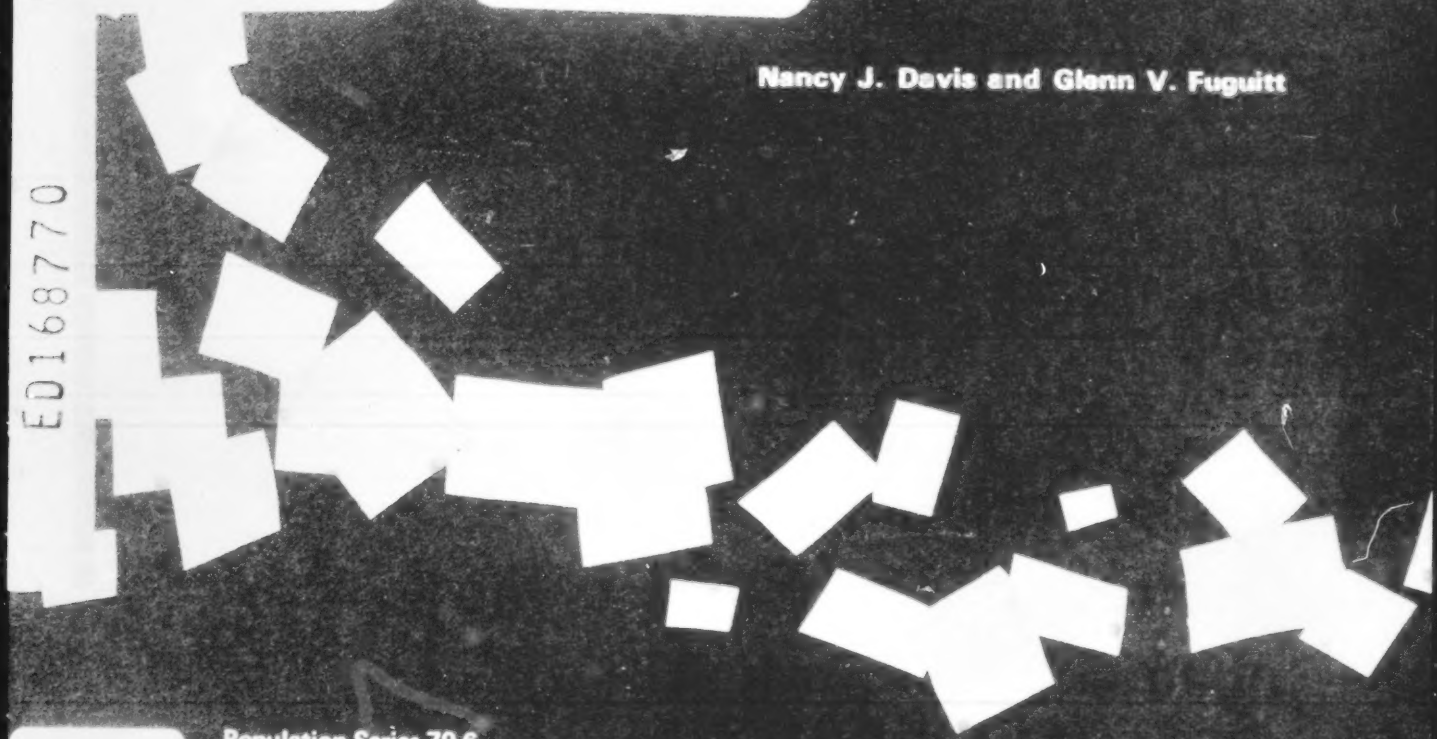

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METROPOLITAN AND NONMETROPOLITAN MIGRATION STREAMS IN WISCONSIN, 1965-1970

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Metropolitan and Nonmetropolitan Migration Streams in Wisconsin: 1965-1970

INTRODUCTION

Population redistribution is of great significance today. With the United States birth rate now at an all-time low, our primary population concerns are less with breeding ourselves out of space, and more with issues related to where people live. Considerable attention has been given in recent years to what Peter Morrison (1970) calls a problem of "maldistribution"--that of concentrating too many people in too little of the available space. Throughout this centruy, more and more of our people have been concentrating in and around large cities. Recently Pickard estimated that by the year 2000, 70 percent of the U.S. population will be concentrated in 12 megalapolises that occupy one-tenth of the conterminous land area (U.S. Commission of Population Growth and the American Future, 1973).

Some possible consequences of intense concentrations of population that have been recognized include increased interpersonal conflicts, locational mismatches between people and their jobs, environmental pollution, and greater congestion of traffic and public facilities. Many proposals have been made for state and national programs to discourage growth in metropolitan areas and encourage it in nonmetropolitan places (U.S. Commission on Population Growth and the American Future, 1973). Some population redistribution has taken place, particularly since 1970, as many nonmetropolitan areas

have changed from population decline to population growth as a result of both expansion of industry and tourism, and an increase in retired residents. One reason may be that large urban complexes are no longer viewed as positively as they once were (Beale, 1975).

Recent changes in population distribution should be measured because such shifts are likely to have important policy implications. Particularly in an era of low fertility, population redistribution is brought about largely through migration. Some of the potentially adverse consequences of population change may be avoided through private planning and government programs, but these efforts must be based on knowledge of the current extent, direction, and socio-economic composition of migrant streams among different geographic areas. Given our concern with metropolitan concentration, there is particular need to study the interchange of people between metropolitan and nonmetropolitan areas.

This report focuses on migration in the state of Wisconsin. Using data from the U.S. Census, we examined the volume and composition of metropolitan and nonmetropolitan migration over the 1965-70 period. Wisconsin demonstrates many of the elements of U.S. population trends. Milwaukee is a major metropolitan area, part of a growing urban complex along Lake Michigan that some predict will evolve into a megalapolitan belt connecting Green Bay with Chicago. Several small metropolitan and sub-metropolitan centers are scattered throughout the state, and the suburban influence of Minneapolis-St. Paul is increasingly felt in the western part of Wisconsin. Government officials recognize that population distribution issues should be considered in planning for Wisconsin's future development

(Deshpande, Friedman, Ross and Schorler, 1973; Erickson and Huddleston, 1975). Results from a study of population flows in Wisconsin should be valuable for those concerned with policy matters within the state, and should also provide some insights for those who major interest is with other parts of the nation.

Before discussing the migration streams found in Wisconsin, we will consider some general population shifts that have occurred in the United States and in Wisconsin over recent decades. A number of studies have examined patterns of migration at the national level. (See, for example, Thornthwaite, 1934; Price, 1948; Bogue, Shryock, and Hoermann, 1957; Tarver, Gurley and Skees, 1967; Wolpert, 1967; Adams, 1969; Vernon, 1969; and Roseman, 1970). For the period 1930 to 1970, trends revealed by these studies include: (1) a westward shift of the population, particularly from the Midwest to the West Coast; (2) a rural-to-urban shift comprising three submovements, i.e. from farm to rural nonfarm, from small town to metropolis, and from farm to metropolis; (3) a flow of white migrants from the Northeast to the Gulf South which has been counterbalanced by a steady flow of black migrants from the South to northern and western metropolises; (4) a general suburbanization of the population with residents (particularly those who are white) leaving the central cities and migrating to the urban fringes; and finally (5) an increasing predominance of migration *among* metropolitan communities rather than the historical pattern of movement from nonmetropolitan to metropolitan areas.

An interesting finding of recent migration research is that nonmetropolitan areas are contributing less and less to metropolitan

growth (Morrison, 1972; Schwind, 1971). In the past, metropolitan areas grew primarily through rural-to-urban migration and through international immigration. Cities had higher rates of natural increase (excess of births over deaths) than today as well as heavy flows of in-migration from outside the metropolitan system. This resulted in high growth rates for virtually all cities. Today, however, metropolitan migrants are primarily from other metropolitan areas with nonmetropolitan areas contributing fewer and fewer migrants because of their dwindling population base. Today, only a few metropolitan areas are receiving most of the migratory growth, and this is largely the result of population loss in other metropolitan areas. In the period from 1950 to 1960, 35 percent of metropolitan increase was the result of new in-migration from nonmetropolitan areas; in the decade of the sixties, this figure was down to 12 percent (U.S. Bureau of the Census, 1971, Table 7).

Recent trends for Wisconsin have paralleled those for the nation. Since 1930 there has been a shift to urban and metropolitan areas, as well as suburbanization of the population. The spread of metropolitan growth is reflected by the increase in the number of counties designated as metropolitan since 1950 (See page 6 for a discussion of the U.S. Government "metropolitan" definition.) We examined distribution trends over the 1950-75 period, controlling for the spread of metropolitan areas by using the 1970 metropolitan definition throughout. There has been a notable population buildup in the southeast corner of the state outside Milwaukee county, and in Dane county (the Madison metropolitan area). We also found increased concentration in the metropolitan counties of the Fox River Valley since 1960.

Overall, the rate of metropolitanization in Wisconsin has slowed down in the most recent census decade. The 1970-designated metropolitan counties included 52 percent of the state's population in 1950, 56 percent in 1960, and 58 percent in 1970. This appears to be due largely to the slower growth in Milwaukee county which accounts for almost one-half of Wisconsin's metropolitan population, and to the fact that nonmetropolitan counties grew twice as rapidly in the 1960's as in the 1950's. (See also Klaff and Fuguitt, 1972).

Recent population estimates indicate a reversal of population concentration in Wisconsin, with nonmetropolitan areas growing more rapidly than metropolitan counties; this is true also for the nation as a whole. There was an increase in the rate of growth of Wisconsin's nonmetropolitan areas in the 1970-75 period compared to 1960-70, again using the 1970 metropolitan definition. (Estimates for 1975 are from the Wisconsin Department of Administration, 1975). Between 1970 and 1975 Milwaukee county declined absolutely, but the suburban counties of the Milwaukee area, and the Kenosha, Madison, Green Bay and Appleton-Oshkosh metropolitan areas were growing more rapidly than the nonmetropolitan counties as a whole.

The post-1970 population "turnabout" in metropolitan and nonmetropolitan growth occurred in both the state and nation, and has aroused considerable interest. This increase in nonmetropolitan growth is not an artifact, nor is it simply an extension of metropolitan growth (Beale and Fuguitt, 1975). The brief analysis above, however, indicates that the absolute shift in the metropolitan-nonmetropolitan growth differential in Wisconsin after 1970 was really

part of a process going on in the 1960's, when the build-up of nonmetropolitan population was already evident, and decentralization around Milwaukee became a prominent factor in metropolitan population dynamics. The comparison of metropolitan counties shows that differential metropolitan growth is still an important component of Wisconsin's population change, and much of this must be due to intercounty metropolitan migration. We conclude that the post-1970 turnabout does not make the study of 1965-70 migration streams only a historical exercise. To the contrary, data for this time period (the most recent available) are essential to understanding the current population redistribution in Wisconsin.

OBJECTIVES AND METHODS

To analyze the redistribution of Wisconsin's metropolitan and nonmetropolitan populations through migration for the period 1965-70, we used data from the one percent Public Use Sample of the Wisconsin population prepared by the U.S. Census. In the 1970 Census, respondents were asked to give their address five years prior to the interview date. With the Public Use Sample, we cross-classified respondents by metropolitan-nonmetropolitan residence in both 1965 and 1970 and compared people in the resulting groups by such characteristics as age, sex, race, education, income, and occupation.

In this analysis, the 1970 definitions of the U.S. Bureau of the Census are used for the terms "urban" and "metropolitan" (U.S. Bureau of the Census, 1972 a:x-xii). The urban population thus comprises all persons living in Urbanized Areas as well as those living in incorporated or unincorporated places of 2,500 or more inhabitants outside Urbanized Areas. (An Urbanized Area consists of a central

city or cities of 50,000 or more population plus the surrounding densely settled urban fringe.) The residual population is classified as "rural." In 1970, Wisconsin was 66 percent urban, compared to 74 percent for the U.S. as a whole.

People living in Standard Metropolitan Statistical Areas (SMSAs) are designated by the U.S. Census Bureau as "metropolitan." These SMSAs, of which Wisconsin has eight, are counties that contain one city (or twin cities combined) of at least 50,000 people plus contiguous counties that are socially and economically integrated with the central-city county. The metropolitan counties of Wisconsin include: Brown, Calumet, Dane, Douglas, Kenosha, LaCrosse, Milwaukee, Outagamie, Ozaukee, Racine, Washington, Waukesha and Winnebago. Those living outside SMSAs constitute the nonmetropolitan population. Note that metropolitan and nonmetropolitan areas have both rural and urban populations.

There are a variety of movements and flows involving the exchange of people, goods, and information--all of which aid in connecting counties, states, and regions into complex networks of social and economic interaction. In this analysis, the concern is with only one type of movement, that of migration. Migration can be viewed as a flow phenomenon, and migrants defined as persons who move from one county to another. Unlike other forms of spatial relocation (commutation or recreational travel), migration involves the disruption of former living arrangements and is frequently associated with a change in employment. Bogue, Shryock, and Hoermann (1957) assumed that intercounty migration involved the severance of pre-

vious family, community and occupational ties. This view has been challenged by Adams (1969: 1) and Marsh (1967: 14), who maintain that intra-SMSA moves constitute five-eighths of all intercounty moves and often do not involve the disruption of such ties.

The Public Use Sample of the 1970 U.S. Census allowed us to use 1965-70 intercounty movements for measuring migration flows within and to the state with a distinction made when such flows involve a change (1) from metropolitan to nonmetropolitan areas; (2) from nonmetropolitan to metropolitan areas; (3) from one metropolitan county to another without being able to distinguish whether this is within or between SMSAs; and (4) from one nonmetropolitan county to another. Persons whose 1965 county of residence was the same as their 1970 county of residence are classified as either metropolitan or nonmetropolitan nonmigrants.

This measure of metropolitan and nonmetropolitan streams of migration does not record all intercounty moves made between 1965 and 1970. The sample of 1970 residents of Wisconsin were asked to report their residence five years prior to the 1970 interview date; as such, persons who made multiple moves in this period are treated the same as those who moved only once. Since our concern is not with the number of moves per migrant, this distinction is not crucial. A second issue of more importance is that persons who migrated after 1965 but who returned to their 1965 county by 1970 are recorded as nonmigrants. The extent of this "return migration" among Wisconsin residents is not known; the data probably understate the number of migrants in the 1965-1970 period. Finally,

because our sample is comprised of 1970 residents of Wisconsin, those persons who were Wisconsin residents in 1965 but who subsequently moved out of state are not included.

The data are from a one percent sample, and some of the streams are small in population size, so we did tests of significance for individual differences considered in the analysis. (For a discussion of the sample, appropriate tests of significance, and standard errors, see U.S. Bureau of the Census, 1972b: 194-203). All unqualified individual comparisons appearing in the text are significant at the 0.05 level. Statements of comparison that are qualified by a phrase such as "it would appear" or "some evidence exists" or "the data suggest" are significant at the .10 level. For generalizations based on sets of percentages, all individual differences in a set are significant at least at the .10 level. We could not employ multiple comparison tests and so emphasis in interpretation has been on overall patterns rather than on isolated individual differences.

FINDINGS

I. The Direction of Migration Streams in Wisconsin

Our review of population growth rates in the 1950-75 period indicates that metropolitan areas overall appear to be stabilizing relative to nonmetropolitan areas in Wisconsin. Turning specifically to the 1965-1970 data, the first panel of both Table 1 and 2 show that this stabilization has been aided by metropolitan residents moving to nonmetropolitan places as frequently as their nonmetropolitan counterparts migrate to metropolitan communities. It is

Table 1. The Redistribution by Migration of Metropolitan and Nonmetropolitan Populations, Wisconsin 1965-70.

1965 Residence	1970 Residence, Persons Five Years Old and Older		
	Metropolitan	Nonmetropolitan	Total
Total			
Metropolitan - percent	93	7	100
(N)	(20,467)[a]	(1,438)	(21,905)
Nonmetropolitan - percent	7	93	100
(N)	(1,180)	(15,043)	(16,223)
Black			
Metropolitan - percent	98	2	100
(N)	(830)	(21)	(851)
Nonmetropolitan - percent	73	27	100
(N)	(32)	(12)	(44)
Nonblack			
Metropolitan - percent	93	7	100
(N)	(19,637)	(1,417)	(21,054)
Nonmetropolitan - percent	7	93	100
(N)	(1,148)	(15,031)	(16,179)

[a]The figures in parenthesis in this table and Table 2 are cell frequencies. Our universe is a one in a hundred sample of the 1970 Wisconsin population five years of age and older. Hence, by adding two 00's to any of the cell frequencies, one gets an estimate of the actual Wisconsin population in that cell.

Table 2. Metropolitan and Nonmetropolitan Streams of Migration, Wisconsin 1965-70.[a]

1965 Residence	1970 Residence, Persons Five Years Old and Over				
	Metropolitan		Nonmetropolitan		Total
	Nonmigrant	Migrant	Nonmigrant	Migrant	
Total					
Metropolitan - percent	83	10	--	7	100
(N)	(18,213)	(2,254)		(1,438)	(21,905)
Nonmetropolitan - percent	--	7	85	8	100
(N)		(1,180)	(13,797)	(1,246)	(16,223)
Black					
Metropolitan - percent	87	11	--	2	100
(N)	(738)	(92)		(21)	(851)
Nonmetropolitan - percent	--	73	25	2	100
(N)		(32)	(11)	(1)	(44)
Nonblack					
Metropolitan - percent	83	10	--	7	100
(N)	(17,473)	(2,162)		(1,417)	(21,054)
Nonmetropolitan - percent	--	7	85	8	100
(N)		(1,148)	(13,786)	(1,245)	(16,179)

[a]Migration refers to inter-county shifts in residence; hence, migrants are persons whose 1965 residence was in a different county than their present (1970) residence.

evident that Wisconsin is not undergoing a uni-directional flow of migration from nonmetropolitan to metropolitan areas. In 1970, the overwhelming majority of our sample (93 percent) were living in the same type of residence as they were in 1965. Only seven percent of those with nonmetropolitan origins had migrated to metropolitan counties by 1970; likewise, only seven percent of the metropolitan residents had moved to nonmetropolitan destinations by 1970.

Table 2 is structured like Table 1, but in addition, those who did not change their type of residence are distinguished as migrants and nonmigrants. Of the Wisconsin population who lived in SMSAs in 1965, more than eight out of ten lived in the same metropolitan county in 1970. A corresponding proportion of nonmetropolitan residents resided in the same nonmetropolitan county in both 1965 and 1970. These Wisconsin figures indicate, then, that about 16 percent of the state's population, whether in metropolitan or in nonmetropolitan areas in 1970, lived in a different county in 1965. This corresponds quite closely to the national figure for the same period, in which 18 percent of Americans were classified as inter-county migrants.

Of the black population five years old and over enumerated in 1970 in Wisconsin, 95.1 percent were residing in SMSAs in 1965; by 1970, this figure was up to 96.3 percent. Although this difference is not statistically significant, it is consistent with recent national trends reported in the literature on the increasing metropolitanization of the black population (Lowry, 1964:39; U.S. Bureau of the Census, 1970).

Migration streams among Wisconsin's nonblack population (panel 3 of Table 1 and 2) are virtually the same as those reported for the total population, since Wisconsin's black population is only 2.3 percent of the total. Because of the extremely small size of the black nonmetropolitan population, calculations in subsequent tables and figures are not done separately by race, but are based on the total Wisconsin population.

Table 3 is essentially a different way of presenting the data from Tables 1 and 2. Whereas Tables 1 and 2 show the directionality of 1965-70 migration flows from metropolitan and nonmetropolitan origins, the third table gives the migrant composition of metropolitan and nonmetropolitan counties at the end of the interval, that is, in 1970. In both metropolitan and nonmetropolitan areas, 16 percent of the population lived in a different county in 1965.

Table 3 indicates that almost two-thirds of the migrants in SMSAs came from other metropolitan counties, while a little over one-half of the migrants in nonmetropolitan places also arrived from metropolitan origins. Hence in 1970, *both* metropolitan and nonmetropolitan counties received the majority of their migrants from metropolitan communities. Approximately the same number of people in the sample moved from metropolitan to nonmetropolitan locations (1,438) as moved in the reverse direction (1,180). Clearly, the much discussed population shift from nonmetropolitan to metropolitan areas is being offset in Wisconsin by a reverse flow of migrants.

Table 3. The Migrant Composition of Metropolitan and Nonmetropolitan Areas in Wisconsin, 1970[a]

Residence in 1970 and Migration Stream	Number	Percent
Metropolitan in 1970		
Nonmigrants	18,213	84
Migrants, 1965-70:		
Metro to Metro	2,254	10
Nonmetro to Metro	1,180	6
Total	21,647	100
Nonmetropolitan in 1970		
Nonmigrants	13,797	84
Migrants, 1965-70:		
Nonmetro to Nonmetro	1,246	7
Metro to Nonmetro	1,438	9
Total	16,481	100

[a]Migrants are persons five years and over in 1970 whose 1965 residence was in a different county than their 1970 residence.

II. Inter-State Migration to Wisconsin

Among persons who were Wisconsin residents in 1970 and who were classified as inter-county movers in the 1965-1970 period, 42 percent reported 1965 addresses in states other than Wisconsin. Of all 1970 Wisconsin residents, almost seven percent lived in another state in 1965. Column 1 of Table 4 shows that the prevalence of inter-state migration varies substantially by type of residence change. Fully one-half of the migrants from metropolitan origins were inter-state movers--regardless of whether that move was to metropolitan or to nonmetropolitan Wisconsin. In contrast, only 36 percent of the nonmetropolitan to metropolitan migrants come from out of state. Interstate migration was even lower among the nonmetropolitan to nonmetropolitan stream with only 24 percent of these migrants crossing state lines in their move.

It is often suggested that metropolitan residents are less attached to their local community and region than their nonmetropolitan peers. The figures in Table 4 lend support to this contention, showing a significantly greater willingness to make inter-state moves (presumably longer distance moves) on the part of migrants from metropolitan areas. It would be interesting to know how many of these inter-state moves are from states contiguous to Wisconsin. Although our data do not provide this information, we suspect that many interstate movers come from the large adjacent SMSAs of Chicago and Minneapolis-St. Paul, and some of these new residents could still be commuting to their old jobs. With data that distinguish between contiguous and noncontiguous inter-state

Table 4. Migrant Status by State of Origin, Urban-Rural Residence, and Sex, Wisconsin 1970.[a]

Residence in 1970 and Migration Stream	Percent Who Moved From Another State 1965-70	Sex Ratio 1970[b]	Percent Urban 1970
Metropolitan in 1970			
Nonmigrants	-	93.6	84
Migrants 1965-70			
Metro to Metro	51	99.1	86
Nonmetro to Metro	36	89.1	83
Total	-	94.0	84
Nonmetropolitan in 1970			
Nonmigrants	-	95.1	39
Migrants 1965-70			
Nonmetro to Nonmetro	24	97.1	45
Metro to Nonmetro	50	100.6	43
Total	-	95.7	40

[a]Cell frequencies for this table are presented in Table 3.

[b]Males per 100 females.

moves, it would be possible to test the hypothesis that longer-distance moves disproportionately involve migrants from metropolitan areas.

III. The Composition of Migration Streams in Wisconsin

Numerous articles and books have examined, with varying degrees of detail, the compositional differences between migrants and nonmigrants (Thomas, 1938; Bogue, Shryock, and Hoermann, 1957; Hamilton, 1959; Adams, 1964; Blanco, 1964; Shryock, 1964; Bowles and Tarver, 1966; Lansing and Mueller, 1967; Bowles, 1970; Stone, 1971; Taeuber and Taeuber, 1971; Morrison, 1972; Price and Sikes, 1975). The overriding concern of these studies has been to determine whether various types of population movements are selective of persons with certain characteristics. If, indeed, migrants differ from nonmigrants in terms of age, sex, race, or socioeconomic characteristics, this obviously has economic and socio-political implications for both sending and receiving areas. Beale (1973) has suggested that out-migration of the young and educated from rural areas may have the following consequences for rural communities: (1) a decline in the range of goods and services offered to consumers, (2) an increase in the cost of providing public services, (3) an older and less skilled working force, and perhaps (4) a restraint upon local government initiative due to the older age of the voting population in communities with heavy out-migration. Selective migration may also have its effects on metropolitan communities; for example, racial hostility and/or racial segregation may be intensified by the selective migration of blacks into a metropolitan area.

Clearly, it is necessary to examine both the directionality and composition of migration streams when assessing the implications of such shifts in population. In this paper, migration streams are decomposed by sex, age, rural-urban residence, employment status, education, occupation, and income. Our objective will be to determine whether migrants differ compositionally from nonmigrants, and perhaps more important, whether migrants of different origin and destination categories differ from each other.

Sex Composition

Column 2 of Table 4 presents sex ratios (a measure of males per 100 females) for each of the residence categories. The sex differentials are small and not statistically significant. They are in the direction of the traditional relationship, however, with females being slightly more likely than males to leave nonmetropolitan origins for metropolitan communities. Males, on the other hand, are slightly overrepresented in migration streams to nonmetropolitan areas (regardless of origin) and in the movement between metropolitan communities.

Rural-Urban Residence

First, we want to reemphasize a point frequently confused; that is, although the terms "urban" and "metropolitan" are often interchanged in the popular press, they are not synonyms; nor are the terms "rural" and "nonmetropolitan." To reiterate, the urban population is comprised of all persons living in Urbanized Areas (see page 6) as well as those persons outside Urbanized Areas who reside in incorporated or unincorporated places of 2500 or more

inhabitants. The residual population is classified as rural. In contrast, the metropolitan population consists of all persons living in *counties* classed as metropolitan (that is, in SMSAs). Thus both metropolitan and nonmetropolitan counties contain rural and urban populations.

Column 3 of Table 4 shows the percent who lived in urban places in 1970 for each of the six residence groups. The major contrast is between those who lived in metropolitan counties in 1970 and those who resided in nonmetropolitan areas, regardless of migration status. The source of this differential should be obvious; nonmetropolitan counties, by definition, do not have cities of 50,000 or more population. Nonetheless, a substantial proportion (40 percent) of the nonmetropolitan population live in urban places, and 16 percent of metropolitan residents live in rural areas.

If it is true that most persons migrate to seek or take up employment and that employment opportunities are perceived to be better in urban areas, then we might expect that migrants would be concentrated in urban areas to a greater extent than nonmigrants. This line of reasoning involves a strong assumption that persons who work in urban areas also live in urban areas. Do the data, in fact, show an urban differential between migrants and nonmigrants? For metropolitan residents, the answer is no, with the percent urban for nonmigrants lying between those for the two migrant streams, which range only from 83 to 86 percent. Among nonmetropolitan residents, however, there is a small differential between migrants and nonmigrants, with the two migrant streams having an urban percentage 4-6 points higher than nonmigrants. The lack of

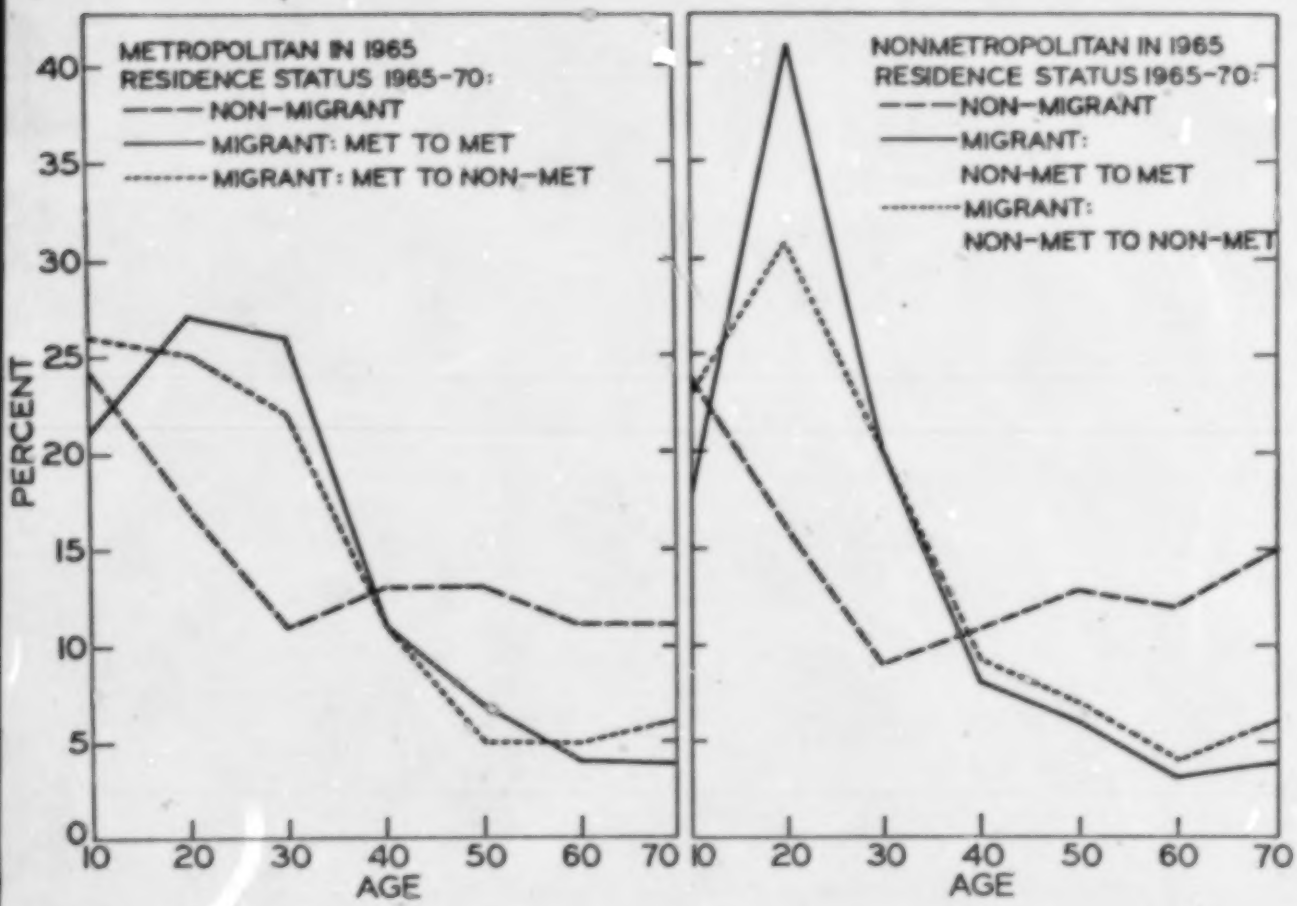

Figure 1. Age Distribution of Migrant and Nonmigrant Population Groups, Wisconsin 1965-70.

a strong association between migration and urban residence among the metropolitan population may be attributed to the commuting of rural residents to urban jobs. Also with the decentralization of industry, employment opportunities are not as concentrated in cities as they once were, and in addition, more and more migrants, particularly of retirement age, are not moving to gain employment.

Age

Probably the best documented generalization in migration research is that young adults are more migratory than any other age group in the population. The graphs in Figure 1 show the age distributions of the two nonmigrant populations and the four migrant groups, clearly supporting this contention. The age distributions for the two nonmigrant populations are almost identical, and are substantially older than the distributions for all four migrant groups. The migrant groups all have an excess of persons in the ages 15-34 and a dearth of those aged 45 and over. Approximately three-quarters of the migrants are under 35 in contrast to only one-half of the nonmigrants.

The major contrast among migrant groups is between those from metropolitan origins and those from nonmetropolitan origins, with migrants of nonmetropolitan origin having a marked peak in their age distribution at ages 15-24--a period of job seeking, educational attainment, and household formation. This pattern is especially strong among persons moving from nonmetropolitan to metropolitan areas; fully 41 percent of these migrants are between the ages of 15 and 24. We might speculate that nonmetropolitan youth are

attracted to employment and educational opportunities, as well as to the social climate offered by metropolitan communities. In contrast, the age distribution of migrants from metropolitan origins is not so peaked at the early ages (15-24), suggesting that career advancement and family expansion may explain a sizable proportion of migration among persons already living in metropolitan areas.

One might suspect that elderly metropolitan residents, no longer dependent on large cities for employment, might prefer to move to nonmetropolitan places which may be less expensive, less congested, and slower in pace of life. Such movement is minimal, however, involving three percent of the residents 65 and older, and is not greater than the reverse flow of older migrants from nonmetropolitan to metropolitan places. Note that the metropolitan to nonmetropolitan stream has the greatest proportion of persons 5-14 of all the migrant groups. The disproportionate number of children in this migration stream lends support to previous studies which report that a common reason given for movement to a rural or small town setting is that it is a better place to raise children. Much of this type of family movement no doubt is to locations adjacent to metropolitan areas and represents an extension of metropolitan decentralization.

Age distributions not shown here were constructed separately for the urban and rural population at the end of the five-year migration period in 1970. The primary difference between the two populations is that age differentials between migrants and nonmigrants, and among categories of migrants, are much more pronounced for those ending up in urban areas. Whereas migrants to rural areas

tend to be older, resembling nonmigrants in their age distribution, migrants to urban places are disproportionately young. (Fully 45 percent of the migrants from nonmetropolitan counties to urban places are between 15 and 24). Migration to urban places, regardless of whether destination is metropolitan or nonmetropolitan, peaks at ages 15-24, whereas migration to rural areas peaks later at ages 25-34 (with the exception of the small group of nonmetropolitan persons moving to rural parts of SMSAs whose migration peaks at ages 15-24). This pattern suggests that young migrants, first leaving their family of orientation and presumably looking for jobs, education, or marriage partners, prefer living in urban places (but not necessarily metropolitan communities). Migrants about ten years older, most of whom are married with young children, are more likely than the 15-24 year olds to choose a rural residence--perhaps because of perceived advantages of rural life for raising children. Again it should be stressed that young people from nonmetropolitan areas are migrating to urban *nonmetropolitan* places as frequently as they are to urban *metropolitan* communities. It appears that *urban residence*, and not necessarily a metropolitan address, is important to the young.

Labor Force Participation

Most previous studies comparing the labor force participation of various migration streams have used a rural-urban breakdown rather than the metropolitan-nonmetropolitan classification employed in this paper. It is popularly assumed that rural migrants moving to urban places have lower educational and occupational skills than

Table 5. The Labor Force Participation of Wisconsin Residents Aged 20-24 by Migrant Status and Sex, 1970.[a]

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Males 20-24:					
Metropolitan in 1970					
Nonmigrants	76.7	7.7	15.6	100.0	9.1
Migrants 1965-70					
Metro to Metro	55.2	2.3	42.5	100.0	4.0
Nonmetro to Metro	70.9	4.3	24.8	100.0	5.7
Nonmetropolitan in 1970					
Nonmigrants	79.5	5.2	15.3	100.0	6.1
Migrants 1965-70					
Nonmetro to Nonmetro	73.8	1.0	25.2	100.0	1.4
Metro to Nonmetro	55.6	3.0	41.4	100.0	4.9
Total	72.1	5.3	22.6	100.0	6.8

Table 5, Continued

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Females 20-24:					
Metropolitan in 1970					
Nonmigrants	63.5	2.6	33.9	100.0	4.0
Migrants 1965-70					
Metro to Metro	54.2	4.4	41.4	100.0	7.6
Nonmetro to Metro	63.0	1.4	35.6	100.0	2.2
Nonmetropolitan in 1970					
Nonmigrants	52.7	3.8	43.5	100.0	6.7
Migrants 1965-70					
Nonmetro to Nonmetro	52.3	3.1	44.6	100.0	5.6
Metro to Nonmetro	32.3	7.8	60.0	100.0	19.6
Total	57.0	3.3	39.7	100.0	5.5

[a]Cell frequencies for this table are presented in Appendix Table A.

[b]Employed persons include those currently working and those with a job but not presently working--for example, workers who are temporarily laid off, on vacation, or ill.

[c]NILF refers to persons not in the civilian labor force which includes men in the armed forces, the retired, students, and others not working and not looking for work. For a technical definition of this term, see: U.S. Bureau of the Census, Census of Population: 1970, vol. 1, Characteristics of the Population, Part A, Number of Inhabitants, Section 1--United States, Alabama--Mississippi, U.S. Government Printing Office, Washington, D.C., 1972, Introduction.

Table 6. The Labor Force Participation of Wisconsin Residents Aged 25-64 by Migrant Status and Sex, 1970.[a]

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Males 25-64:					
Metropolitan in 1970					
Nonmigrants	91.5	2.2	6.3	100.0	2.3
Migrants 1965-70					
Metro to Metro	90.0	3.1	6.9	100.0	3.3
Nonmetro to Metro	87.8	2.6	9.6	100.0	2.8
Nonmetropolitan in 1970					
Nonmigrants	90.1	2.4	7.5	100.0	2.6
Migrants 1965-70					
Nonmetro to Nonmetro	88.6	1.1	10.3	100.0	1.2
Metro to Nonmetro	79.6	6.7	13.7	100.0	7.7
Total	90.2	2.5	7.3	100.0	2.6

Table 6, Continued

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Females 25-64:					
Metropolitan in 1970					
Nonmigrants	48.0	1.9	50.0	100.0	3.7
Migrants 1965-70					
Metro to Metro	42.3	1.7	56.0	100.0	3.9
Nonmetro to Metro	42.9	1.0	56.1	100.0	2.2
Nonmetropolitan in 1970					
Nonmigrants	44.3	1.9	53.8	100.0	4.2
Migrants 1965-70					
Nonmetro to Nonmetro	40.8	1.3	57.9	100.0	3.0
Metro to Nonmetro	42.0	2.7	55.3	100.0	6.0
Total	45.8	1.9	52.3	100.0	3.9

[a]Cell frequencies for this table are presented in Appendix Table A.

[b]Employed persons include those currently working and those with a job but not presently working--for example, workers who are temporarily laid off, on vacation, or ill.

[c]NILF refers to persons not in the civilian labor force which includes men in the armed forces, the retired, students, and others not working and not looking for work. For a technical definition of this term, see: U.S. Bureau of the Census, Census of Population: 1970, vol. 1, Characteristics of the Population, Part A, Number of Inhabitants, Section 1--United States, Alabama--Mississippi, U.S. Government Printing Office, Washington, D.C., 1972, Introduction.

Table 7. The Labor Force Participation of Wisconsin Residents Aged 65+ by Migrant Status and Sex, 1970.

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Males 65 and up:					
Metropolitan in 1970					
Nonmigrants	24.0	.6	75.4	100.0	2.4
Migrants 1965-70					
Metro to Metro	21.4	0	78.6	100.0	0
Nonmetro to Metro	10.0	0	90.0	100.0	0
Nonmetropolitan in 1970					
Nonmigrants	24.0	.7	75.3	100.0	2.9
Migrants 1965-70					
Nonmetro to Nonmetro	23.3	3.3	73.4	100.0	12.5
Metro to Nonmetro	6.1	0	93.9	100.0	0
Total	23.5	.7	75.8	100.0	2.8

Table 7, Continued

Age, Residence in 1970 and Migration Stream	Percent Distribution				Percent of Labor Force Unemployed
	Employed[b]	Unemployed	NILF[c]	Total	
Females 65 and up:					
Metropolitan in 1970					
Nonmigrants	12.0	.4	87.6	100.0	3.4
Migrants 1965-70					
Metro to Metro	15.3	0	84.7	100.0	0
Nonmetro to Metro	12.5	0	87.5	100.0	0
Nonmetropolitan in 1970					
Nonmigrants	10.0	.6	89.4	100.0	5.8
Migrants in 1965-70					
Nonmetro to Nonmetro	2.2	0	97.8	100.0	0
Metro to Nonmetro	3.6	1.8	94.6	100.0	33.3
Total	10.8	.5	88.7	100.0	4.6

[a]Cell frequencies for this table are presented in Appendix Table A.

[b]Employed persons include those currently working and those with a job but not presently working--for example, workers who are temporarily laid off, on vacation, or ill.

[c]NILF refers to persons not in the civilian labor force which includes men in the armed forces, the retired, students, and others not working and not looking for work. For a technical definition of this term, see: U.S. Bureau of the Census, Census of Population: 1970, vol. 1, Characteristics of the Population, Part A, Number of Inhabitants, Section 1--United States, Alabama--Mississippi, U.S. Government Printing Office, Washington, D.C., 1972, Introduction.

the urban population they are joining and thus contribute disproportionately to urban unemployment. However, studies done in the 1960's and 1970's have generally found that rural to urban migrants are closer to native urbanites in education, occupational skills, income, and employability than to the rural residents they left behind (Bacon, 1971; Bowles, 1970, Morrison, 1972; Price & Sikes, 1975). Analysis based on the 1967 Survey of Economic Opportunity shows that rural-to-urban migrants generally experience less poverty and unemployment than persons in rural areas, but slightly more than native urbanites. This higher incidence of poverty and unemployment at the place of destination may only be of temporary duration (Bowles, 1970). In short, recent research indicates that rural-to-urban migrants are not as disadvantaged (educationally, occupationally, or economically) as often assumed.

Tables 5, 6, and 7 show the labor force status of Wisconsin men and women by age and by migrant status. For men, labor force participation is highest among those 25-64 years of age--the years when most men have families to support. (Compare the first panel of the three tables). Women, on the other hand, have their highest rate of labor force participation between 20 and 24. By their mid-20's, most women are involved in child-related responsibilities, often to the exclusion of employment outside the home (second panel of Tables 5, 6, and 7). At all ages and for all streams, with only two exceptions in these three tables, the proportion of men in the labor force is higher than the corresponding proportion for women.

For men 20-24, labor force participation is highest among nonmigrants (Table 5). Approximately 85 percent of the nonmigrants aged 20-24 are in the labor force. This is significantly higher than the 75 percent of young migrants with nonmetropolitan origins, who are in the labor force. Even lower rates of labor force participation (less than 60 percent) are found for young migrants with metropolitan origins.

Among females 20-24, those in metropolitan destinations who are nonmigrants or who have moved from nonmetropolitan places are most likely to be in the civilian labor force and to be employed (Table 5). Residence in a nonmetropolitan county appears to be associated with slightly lower than average rates of employment and labor force participation, with the metropolitan-to-nonmetropolitan stream having a particularly low rate of employment and high rate of unemployment.

For men in the prime working years 25-64 (Table 6), there is less variation by migrant status in employment and labor force participation than is the case for the younger men. The major contrast for men 25-64 is between the metropolitan-to-nonmetropolitan migration stream and the other five residence categories. Almost seven percent of the metropolitan-to-nonmetropolitan stream is unemployed, a finding consistent with recent national data published for the period 1970-1973 (U.S. Bureau of the Census, 1974).

Among women 25-64, employment rates vary from a high of 48 percent among metropolitan nonmigrants to a low of 41 percent for

nonmetropolitan women who migrated to other nonmetropolitan counties (Table 6). The major distinction for females 25-64 involves the metropolitan nonmigrants who have higher rates of employment and labor force participation than the other residence groups. Unemployment rates for women 25-64 do not vary significantly by migration stream.

The unemployment figures for both men and women in the prime working ages demonstrate that nonmetropolitan origin is not a handicap to employment in Wisconsin. Migrants from nonmetropolitan to metropolitan areas have similar proportions employed and unemployed as do migrants between different metropolitan counties. In fact, persons of metropolitan origin who have moved to nonmetropolitan counties experience the highest rates of unemployment among the categories considered here.

Employment figures for men and women 65 years and older are presented in Table 7. Most persons of this age are not in the labor force. There is some evidence, however, of a differential in employment rates, with male migrants who moved in either direction between metropolitan and nonmetropolitan areas having lower rates of employment and labor force participation than most of the other male migrant and nonmigrant groups of this age. Perhaps migration for this group, in direct contrast to the migration of younger persons, is associated with retirement rather than with the search for new employment. For women 65 and over, the major differential occurs between migrants to nonmetropolitan counties from metropolitan or nonmetropolitan origins, who have lower than average employment rates than the other residence groups.

In summary, there is substantial variation in employment and labor force participation by sex, by age, and by migrant status. The differential rates of employment by migrant status are not consistent across sex and age categories and hence do not allow general statements to be made about the relationship between employment and residence change. *We found no systematic evidence that particular migrant streams are disadvantaged compared with persons in the areas of origin or destination.* The only individual stream showing lower employment rates than nonmigrants at origin or destination involves men in the middle years moving from metropolitan to nonmetropolitan locations. A plausible speculation is that these could include unsuccessful migrants to metropolitan areas who have returned to their place of origin.

These differential rates of employment illustrate the selective nature of the migration process-a fact that has implications for both sending and receiving areas as well as for individual migrants and nonmigrants. Also evident is the need to control for such basic demographic variables as age and sex when examining migration differentials.

School Enrollment of Persons 20-24

Although economic factors are usually emphasized in the interpretation of migration among those in the working years, we found that a substantial proportion of the migrants aged 20-24 were not employed in 1970. The pursuit of higher education evidently is an important factor in the migration of young adults in Wisconsin. Table 8 shows that among males 20-24, migrants are considerably

Table 8. School Enrollment Among Persons 20-24 by Migrant Status and Sex, 1970.

Residence in 1970 and Migration Stream	Enrolled in School in 1970			
	Males 20-24		Females 20-24	
	Percent	Number	Percent	Number
Metropolitan in 1970				
Nonmigrants	25.0	532	20.0	641
Migrants 1965-70				
Metro to Metro	64.0	172	36.5	203
Nonmetro to Metro	47.0	117	26.4	208
Nonmetropolitan in 1970				
Nonmigrants	16.7	347	8.4	345
Migrants 1965-70				
Nonmetro to Nonmetro	47.9	96	28.5	130
Metro to Nonmetro	49.5	99	25.2	115
Total	33.1	1363	21.4	1642

more likely to be enrolled in school than nonmigrants. This is particularly true of the metropolitan-to-metropolitan stream, in which fully 64 percent are currently enrolled in school. High levels of school attendance are found also in nonmetropolitan locations. Almost one-half of the male migrants and one-quarter of the female migrants aged 20-24 and living in nonmetropolitan counties in 1970 were enrolled in school. Many of the University of Wisconsin campuses are located in nonmetropolitan counties.

By and large, women are less likely to be enrolled in school than men--33 percent of the men 20-24 are enrolled compared to 21 percent of the women. Although the between-group differentials are smaller, school enrollment among women 20-24 follows approximmately the same pattern described for men 20-24. Again, nonmigrants in nonmetropolitan counties have the lowest rates of school attendance, and there is evidence that migrants in the metropolitan-to-metropolitan stream are the most likely to be enrolled in school.

The high rates of school attendance among young adults suggest that the desire for higher education may well be a prime motivating factor in the migration of the young. Clearly, school-related variables should be considered when examining migration patterns among young adults. Both school attendance and labor force participation rates are considerably higher for young men than for young women, probably reflecting the earlier age of marriage among women and their involvement in domestic and child-related activities, often to the exclusion of achievement roles outside the home. Hence for young women, nonparticipation in the labor force may often signify involvement with home and child-oriented activities, whereas for men such a status is apt to mean enrollment in higher education.

Socioeconomic Differentials of Full-Time Workers 25-64

In this part of the report, we restricted our universe to Wisconsin residents who were full-time workers and aged 25-64 in 1970. (Full-time workers are defined to include those persons who were gainfully employed or worked on family farms or businesses at least 30 hours during the week of the 1970 census.) We eliminated persons 20-24 and persons 65 or over because so many of these people are not in the labor force and thus do not have meaningful occupational and income classifications. Lifewise, nonworkers and part-time workers have been excluded from the analysis because of their lack of occupation and income in the first case and their artificially low income in the latter; these factors would unnecessarily confound the discussion of socioeconomic differentials. In the interest of comparability, we employed the same population base (full-time workers 25-64) for the analysis of educational differentials, even though we could have used the total adult population.

Education: Numerous books and articles have examined the hypothesis that migration is selective of the highly educated (Thomas, 1938; Bogue, Shryock, and Hoerman, 1957; Hamilton, 1959; Tarver, 1964; Lansing and Mueller, 1967; Kirschenbaum, 1971; Stone, 1971; Fredrickson, 1974). Some authors have found evidence of positive selection for education among migrants of various streams when compared to nonmigrants (Lansing and Mueller, 1967; Kirschenbaum, 1971; Fredrickson, 1974). However, others have observed mixed patterns of educational selectivity among migrants. Dorothy Thomas (1938), in her classic work on migration differentials, found no consistent pattern of educational selectivity among migrants. Likewise,

Hamilton (1959) found that blacks who moved out of the South were positively selected for education, whereas among whites, those with low educations were most likely to be out-migrants. Everett Lee (1966) suggested that migrants who move because of factors pushing them out of the place of origin (for example, high unemployment at the origin) are negatively selected for education, but those who migrate because of factors pulling them to the place of destination (for instance, employment opportunities at the destination) are positively selected for education.

In short, the literature suggest that: 1) there is little agreement on the existence or direction of educational differentials by migrants status; results vary depending on the geographic area and time period studies, the population examined, and the measure of education used. 2) Educational differentials vary for different subgroups of the population. Blacks may differ from whites; women may differ from men--to cite two obvious examples. 3) The existence and direction of educational differentials may be influenced by whether the educational level of migrants is compared with the population at origin or the population at destination. A number of studies have shown that certain categories of migrants downgrade the average educational level of both sending and receiving areas (Karl and Alma Taeuber, 1965; Blau and Duncan, 1967; Irene and Conrad Taeuber, 1971).

In this study of Wisconsin, we used the percent of high school graduates in each residence category to compare the educational attainment of migrant streams with each other and with nonmigrants. Table 9 shows the percent of high school graduates among full-time

Table 9. Educational Attainment Among Full Time Workers 25-64 by Migrant Status and Sex, 1970.[a]

Residence in 1970 and Migration Stream	Percent Completing 12 or More Years Schooling			
	Males		Females	
	Crude	Age Std.[b]	Crude	Age Std.[b]
Metropolitan in 1970				
Nonmigrants	60.8	61.9	68.0	68.3
Migrants 1965-70				
Metro to Metro	79.5	70.2	77.7	72.4
Nonmetro to Metro	80.5	70.3	85.9	79.5
Nonmetropolitan in 1970				
Nonmigrants	55.0	56.9	66.5	67.7
Migrants in 1965-70				
Nonmetro to Nonmetro	74.2	66.4	71.6	68.2
Metro to Nonmetro	79.5	69.6	77.4	70.9
Total	61.4	61.4	68.7	68.7

[a]Cell frequencies for this table are presented in Appendix Table B.

[b]Indirectly standardized by age. See text.

workers aged 25-64 in each of the six residence categories. Calculations have been done separately for males and females because of the substantial difference in socioeconomic characteristics between the sexes. Table 9, as well as Tables 10 and 11, present both crude (unstandardized) rates and adjusted rates standardized for age. Standardization was employed because in our sample, migrants (especially those in metropolitan destinations) are substantially younger than nonmigrants, and it is well known that, in the aggregate, the young are better educated than the old. Consequently, if age standardization were not used, the educational level of certain migrant groups might be biased upward due to their disproportionate selection of young people. The indirect method of standardization has been employed primarily because the small frequencies in some cells would not support direct standardization (see Kitagawa, 1964). In age-standardizing our rates, we used eight five-year age groups over the interval 25-64; the standard rates are based on the total population of the six residence categories.

In Table 9, the crude rates show that among males, nonmigrants in nonmetropolitan counties have the lowest percent of high school graduates followed by nonmigrants living in SMSAs; 55 percent of the nonmetropolitan nonmigrants have completed high school compared to 61 percent of the nonmigrants residing in SMSAs. The four migrant streams have the highest rates of high school completion, ranging from 74 to 81 percent. There is not a significant difference in educational attainment among the various migration streams, but there is between the two nonmigrant groups, and between these and the migration steams. When age standardization is employed, the

four migrant streams, with their disproportionate number of young people, have their proportion of high school graduates lowered about ten percentage points. Although standardization cuts in half the educational differentials between migrants and nonmigrants, it does not alter any of the basic relationships found in the crude rates.

Comparing these results to national figures (U.S. Bureau of the Census, 1974: Tables 7-8), we find a rough correspondence between Wisconsin and U.S. men in that nationally, migrants have higher completion rates for both high school and college than do nonmigrants. Although the universes are not strictly comparable, this suggests that the higher educational attainment among male migrants in Wisconsin (when contrasted to nonmigrants) is not a unique or localized phenomenon.

Turning to educational patterns among Wisconsin women, Table 9 shows that a greater proportion of Wisconsin women have completed high school than men--which is consistent with the U.S. as a whole (Folger and Nam, 1967). Female educational differentials by residence status are not as pronounced as those found for men. Unlike the men in our sample, Wisconsin women show no educational differential between nonmigrants in SMSAs and nonmigrants in non-metropolitan counties. If crude rates are used, female migrants with metropolitan origins and/or destinations are more likely to have completed high school than female nonmigrants. However, when rates are age standardized, the migrant/nonmigrant educational differential becomes very small. Nonetheless, one interesting

differential remains, which is that women moving from nonmetropolitan counties to SMSAs have higher rates of high school completion than the other migrant and nonmigrant groups, whether crude or age-standardized rates are used. These findings lay to rest possible fears that migrants from nonmetropolitan areas are downgrading the quality of the metropolitan labor force they are joining. For both males and females, the nonmetropolitan to metropolitan migration stream is positively selected for education.

Occupation: A positive association has often been noted between occupational status and the propensity to migrate (Bogue, Shryock, and Hoerman, 1957; Tarver, 1964; Lansing and Mueller, 1967; Fredrickson, 1974). Lansing and Mueller (1967) have suggested that differentials in the occupational composition of migrant and nonmigrant groups may arise because of the greater demand-area for the services of persons with high-status occupations. In other words, a physicist competes on a national job market, thus having migration built into his job, whereas a construction worker tends to sell his services to a more localized employment market. Most of the studies that have examined occupational differentials in migration have restricted their sample to males and have only considered migration between large regions (Bogue, Shryock, and Hoerman, 1957), or else have examined restricted migration streams (between SMSAs in the case of Lansing and Mueller's work, and migration to nonmetropolitan urban places in Fredrickson's research).

In this examination of occupational differentials, we looked at both males and females, and we considered the occupational composition of nonmigrant groups as well as the composition of all

Table 10. Occupational Status Among Full-Time Workers 25-64 by Migrant Status and Sex, 1970.[a]

Residence in 1970 and Migration Stream	Percent with White Collar Occupations			
	Males		Females	
	Crude	Age Std.[b]	Crude	Age Std.[b]
Metropolitan in 1970				
Nonmigrants	39.1	39.2	60.6	60.7
Migrants 1965-70				
Metro to Metro	61.7	59.0	72.4	71.2
Nonmetro to Metro	53.8	51.3	67.2	65.7
Nonmetropolitan in 1970				
Nonmigrants	28.2	28.4	49.6	49.9
Migrants 1965-70				
Nonmetro to Nonmetro	43.3	41.6	43.3	42.7
Metro to Nonmetro	39.4	45.1	53.8	52.5
Total	37.5	37.5	57.1	57.1

[a]Cell frequencies for this table are presented in Appendix Table B.

[b]Indirectly standardized by age. See text.

possible migrant streams involving metropolitan and nonmetropolitan populations. The percent employed in white-collar occupations has been used as an indicator of occupational status. White-collar occupations include the following four census categories: 1) professional, technical and kindred, 2) managers and administrators, except farm, 3) clerical and kindred, and 4) sales workers. Although it might be argued that some clerical and sales occupations are of lower status than some blue-collar jobs (like skilled craftsmen), in general, the white-collar-blue-collar split is the best and most frequently used dichotomous indicator of occupational status.

Table 10 presents the crude and age-standardized rates of white-collar employment among the various residence categories. Again standardization has been employed to control for any confounding effects of age--for example, the tendency of the young to concentrate more in professional, technical, and managerial positions than their older, less-educated counterparts. For the most part, however, age-standardization has little effect, and the findings reported below apply to both crude and standardization rates. Among males 25-64 working full-time, nonmigrants in nonmetropolitan counties have the lowest rates of white-collar employment--rates which are substantially below those of the other five groups. On the other end of the spectrum, the data suggest that migrants with metropolitan destinations have the highest rates of white-collar employment. Intermediate levels of white-collar employment, which are not signficantly different from each other, are found for nonmigrants in SMSAs and the two migrants streams moving to nonmetropolitan

destinations. Hence a clear-cut occupational differential does not exist between male migrants and nonmigrants unless destination is held constant. Within both the 1970 metropolitan and nonmetropolitan populations, however, migrants are much more likely than nonmigrants to hold white-collar positions. Finally, it appears that migrants are more likely to have white-collar employment in SMSAs than in nonmetropolitan counties; the same is true of nonmigrants who are more likely to have white-collar jobs if they reside in SMSAs. This occupational differential may reflect the greater prevalence of farming in nonmetropolitan areas and the deconcentration of industry which has increased the number of blue-collar workers in nonmetropolitan counties. The financial, administrative, and governmental activities concentrated in large cities also require a large corps of white-collar workers.

The occupational differentials by residence status reported here correspond roughly to the previously discussed educational differentials by residence status, supporting the well-documented link between educational attainment and subsequent occupational achievement (Blau and Duncan, 1967; Sewell and Hauser, 1975). Finally, the Wisconsin occupational differentials for men are also roughly equivalent to similiar U.S. data for the 1970-73 period (U.S. Bureau of the Census, 1974:Table 13).

Occupational differentials among women 25-64 working full-time are smaller than those found among men and are generaly overlapping, thus making generalizations difficult. Among females, whether or not residence is metropolitan in 1970 appears to have the greatest impact upon the percent of white-collar workers whereas for males,

both metropolitan residence and migrant status were important. Table 10 shows that between 61 and 72 percent of these working women living in SMSAs had white-collar employment compared to only 43-54 percent of those living in nonmetropolitan counties. For men, the percent of white-collar workers in a residence group is associated positively with the percent of high school graduates in that group. For women there does not seem to be much correspondence between educational attainment and occupational status (compare tables 9 and 10). It is likely that white-collar employment among women disproportionately involves the lower-status clerical and sales jobs--those not requiring a large amount of schooling--and as such does not show much correspondence with educational attainment.

To summarize, female occupational differentials are small and overlapping. There is no clear-cut origin effect nor a migrant/nonmigrant differential, but the pattern of results does suggest a destination effect with metropolitan women more likely than nonmetropolitan women to have white-collar positions.

Income: Lansing and Mueller (1967) in their research on inter-SMSA migration have noted that all three indicators of socioeconomic status (education, occupation, and income) are positively correlated with the propensity to migrate. Fredrickson (1974) found the same for migration to nonmetropolitan urban places, with migrants having higher median incomes and educations than nonmigrants, as well as a higher proportion employed in the professions.

In comparing income distributions, controls must be made for age and sex. Women have incomes substantially below those of men, and the young tend to earn less than their older counterparts,

Table 11. Personal Income in 1969 Among Full-Time Workers 25-64 by Migrant Status and Sex.[a]

Residence in 1970 and Migration Stream	Percent with Personal Incomes of $10,000+ for Males and $5,000+ for Females			
	Males		Females	
	Crude	Age Std.[b]	Crude	Age Std.[b]
Metropolitan in 1970				
Nonmigrants	45.5	45.1	52.1	52.1
Migrants 1965-70				
Metro to Metro	51.7	53.7	55.3	55.7
Nonmetro to Metro	36.4	38.1	51.6	51.8
Nonmetropolitan in 1970				
Nonmigrants	27.8	27.7	33.8	33.8
Migrants 1965-70				
Nonmetro to Nonmetro	31.3	32.6	25.4	25.4
Metro to Nonmetro	35.8	36.8	31.2	31.3
Total	38.6	38.6	44.6	44.6

[a]Cell frequencies for this table are presented in Appendix Table B.

[b]Indirectly standardized by age. See text.

other things being equal. Among men, age standardization slightly raises the relative income of the four migrant groups, all of which have disproportionately young populations (Table 11). In Table 11, $10,000 per year is the division between high and low incomes for males and $5,000 per year is the division for females. The different cut-off points for the two sexes were used in order to divide the two income distributions near the median, and for females this point was substantially below that for males. (Individual rather than family income was used in this analysis.)

Among men 25-64 working full-time, migrants moving from one SMSA to another have the highest percent with incomes of $10,000 per year. Nonmigrants in SMSAs, although below the metropolitan-to-metropolitan stream in income, have a disproportionate number of high-income earners when compared to the other four groups. These latter groups, which include all men in nonmetropolitan counties in 1970 and the nonmetropolitan-to-metropolitan migration stream, have similar (low) proportions of high-income earners ranging from 28-36 percent. (Age standardization does not alter any of these crude relationships). We found that male migrants are more educated than nonmigrants, and that within destination categories, male migrants are more likely to hold white-collar jobs than nonmigrants. However, there is not clear income distinction between migrants and nonmigrants. Nonmigrants living in nonmetropolitan counties have the lowest percent earning $10,000 per year, but this rate is not significantly below that experienced by the nonmetropolitan-to-nonmetropolitan stream. Among metropolitan residents,

nonmigrants occupy an intermediate position, earning more than the nonmetropolitan-to-metropolitan stream but less than migrants moving between SMSAs.

The income data in Table 11 suggest that wage levels (and probably living costs as well) are higher in SMSAs than in nonmetropolitan counties. Of the three metropolitan residence groups, only the nonmetropolitan-to-metropolitan stream has an income level that compares to the low incomes of the three nonmetropolitan residence groups. Hence the fact that men moving from nonmetropolitan to metropolitan counties have higher educational levels and rates of white-collar employment than nonmigrants in SMSAs is not translated into higher earnings. In any event, income is more dependent on the type of county a man lives in (metropolitan or nonmetropolitan) than on migrant status. This is in contrast to our findings for educational attainment and, to a lesser extent, for occupational status.

Among females, the metropolitan/nonmetropolitan distinction is the only income differential found, with over 50 percent of the metropolitan women earning $5,000 per year in 1970 compared to only 25-34 percent of the nonmetropolitan females. Considering 1970 metropolitan and nonmetropolitan residents separately, women showed no substantial income differentials between migrants and nonmigrants. For women, the income distribution corresponds rather closely to the occupational distribution in which high incomes, like white-collar jobs, are associated with metropolitan residence. Yet high educational attainment for women appears to be associated more with migrant status than with metropolitan destination.

SUMMARY

Migration is the major process by which the distribution of population changes, and as such has important implications for many social and economic problems. This report considers the migration shifts of 1970 Wisconsin residents of metropolitan and nonmetropolitan counties over the time period 1965-70. Data are from the one-percent Public Use Sample of the 1970 U.S. Census, and the major distinctions drawn are between those who did not move from one county to another during the five-period, and those who moved: (a) between metropolitan counties; (b) between nonmetropolitan counties (c) from nonmetropolitan to metropolitan counties, and (d) from metropolitan to nonmetropolitan counties. We compared the magnitude of these migrant and nonmigrant groups in order to reveal the direction of population shifts in Wisconsin, and we contrasted the people in these different groupings by such characteristics as age, sex, race, rural-urban residence, employment status, school enrollment, education, occupation, and income. Metropolitan counties are those in 1970 Standard Metropolitan Statistical Areas (SMSAs).

The results of the analysis may be summarized as follows:

1. Metropolitan and nonmetropolitan streams of migration are of virtually the same magnitude in Wisconsin; seven percent of the nonmetropolitan residents in 1965 had migrated to metropolitan counties by 1970, while a corresponding seven percent of the metropolitan population had moved to nonmetropolitan counties by 1970. In terms of absolute numbers as well, the metropolitan-nonmetropolitan

composition of Wisconsin remained virtually unchanged in the period 1965-1970. *Clearly, migration from nonmetropolitan areas is being counterbalanced by migration into these counties.*

2. Over one-half of the migration into both metropolitan and nonmetropolitan counties in Wisconsin originated from metropolitan communities. *Unlike past decades, metropolitan population growth in Wisconsin is now influenced more by migration streams within and among metropolitan areas than by streams from nonmetropolitan to metropolitan counties.*

3. Almost one-half (42 percent) of the intercounty movers did not live in Wisconsin in 1965. Crossing state lines was much more prevalent among migrants living in SMSAs in 1965 than among those living in nonmetropolitan counties.

4. The migrant and nonmigrant populations did not differ in sex composition; both were 49 percent male. Likewise, the sex ratios for the four migrant streams were not significantly different from each other.

5. Rural-urban status in 1970 was largely dependent on whether residence in 1970 was in a metropolitan or nonmetropolitan county; as would be expected, SMSAs were much more urban in composition.

6. Migrants in Wisconsin have a younger age distribution than their nonmigrant counterparts. In addition, migrants moving to SMSAs were on the average somewhat younger than migrants moving to nonmetropolitan counties--regardless of origin. *This study once more confirms that age is a major dimension of migration differentials.*

7. Among men aged 20-24, labor force participation rates are highest for nonmigrants and lowest for migrants with metropolitan origins. For men 25-64, the major contrast is between the metropolitan-

to-nonmetropolitan migration stream, with its low employment and high unemployment, and the five other residence categories. Finally, for men 65+, migrants moving in either direction between metropolitan and nonmetropolitan areas have the lowest rates of employment and labor force participation.

8. For women aged 20-24, metropolitan nonmigrants and the nonmetropolitan-to-metropolitan migration stream have the highest employment and labor force participation rates. Among women 25-64, highest employment rates appear to be found among nonmigrants in SMSAs, as was the case for women 20-24. The major differential for women 65+ is between migrants to nonmetropolitan counties (with lower than average employment rates) and the other four residence groups.

9. The high rates of school attendance among young adult migrants, especially males, suggests that *the desire for higher education may be a prime motivating factor in the migration of the young.*

Next we considered the education, occupation and income status of migrant and nonmigrant men and women aged 25-64 who were working full-time, with an adjustment for differences in age. Results were as follows:

10. Among men 25-64 working full-time, migrants are more likely to have completed high school than nonmigrants, and nonmigrants in SMSAs are more likely to be high school graduates than nonmigrants in nonmetropolitan counties. For females, educational differentials also appear to favor migrants over nonmigrants. Though differences are not significant for women, it is of interest that for both men

and women, the group with the highest proportion of high school graduates is the nonmetropolitan-to-metropolitan migration stream.

11. Among men 25-64 working full-time, nonmigrants in nonmetropolitan counties are the least likely to be employed in white-collar occupations, whereas migrants with metropolitan destinations seem to be most likely to hold white-collar jobs. Considering 1970 metropolitan and nonmetropolitan residents separately, migrants have significantly higher rates of white-collar employment than nonmigrants. For women, place of residence in 1970 has the greatest impact on the prevalance of white-collar employment. Women in SMSAs were substantially more likely to be employed in white-collar positions than women in nonmetropolitan counties, regardless of migration experience.

12. For both men and women, persons residing in metropolitan counties were the most likely to have high incomes (defined as $10,000 per year for men, $5,000 per year for women). An exception is the group of males who moved from nonmetropolitan to metropolitan areas; their income level was lower and close to the nonmetropolitan groups.

13. Summarizing results for the three socioeconomic characteristics, *male migrants are more likely than nonmigrants to have completed high school, and more likely than nonmigrants at their destination to be employed in white-collar occupations. Migrants are not more likely than nonmigrants to earn $10,000 per year, however.* Men residing in SMSAs have higher incomes for the most part than men in nonmetropolitan counties, so that nonmigrants

in SMSAs earn more on the average than the more educated stream of migrants moving from metropolitan to nonmetropolitan counties.

For women, educational differentials appear to favor migrants over nonmigrants, whereas higher occupational and income status goes with current residence in a metropolitan area regardless of migration status.

IMPLICATIONS

What is the significance of migration in Wisconsin today? Our data show that one out of six persons in Wisconsin in 1970, five years old and over, lived in a different county in 1965. This may not seem a very big proportion, yet we know that a larger group, not studied here, changed residences *within* a county in the state. (Some works refer to the latter as *movers*, to distinguish them from migrants). Over this five-year interval, 20 percent of the population of Wisconsin moved from one residence to another, a figure close to the U.S. total.

There is another reason why the one-out-of-six figure is inadequate to indicate the importance of migration in the state. This is our general finding that migration streams differ in social characteristics from each other and from the groups of nonmigrants. As a consequence, much higher proportions of some subgroups of the population were intercounty movers. For example, our data show (like virtually all previous research) that much migration, particularly to urban and metropolitan areas, is associated with the transitions of young adulthood-including seeking higher education

and employment opportunities. In Wisconsin 36 percent of the men and 40 percent of the women 20-24 in 1970 lived in another county five years earlier.

The effect of selective migration on the areas losing and receiving migrants has long been a subject of concern. Are problems of big cities compounded by the net influx of rural people unprepared for urban life? Do nonmetropolitan areas suffer because their best people seek opportunity elsewhere? The data at hand provide some evidence for questions such as these.

Men and women moving into metropolitan areas in Wisconsin have equal or higher, rather than lower, educational and occupational statuses than those they have joined, even after adjusting for differences in age. Although the overall level of income does appear to be lower for these migrants, *one cannot conclude that persons moving into Wisconsin's metropolitan areas are on the whole ill-prepared for a big-city environment.*

Similarly, there has been an influx to nonmetropolitan areas of former metropolitan residents whose education and occupational statuses are equal or higher overall than those already living there. This counterstream is not always equal in labor force participation, educational attainment, occupational status, or income level to the younger group moving from nonmetropolitan to metropolitan areas. Nevertheless it has undoubtedly helped to compensate both numerically and in terms of skills for the loss of former nonmetropolitan residents through migration.

Because we know nothing about the persons residing in Wisconsin in 1965 who lived outside the state in 1970, we are unable to draw

precise conclusions concerning the net effects of migration interchanges on the metropolitan and nonmetropolitan parts of Wisconsin. However, unless the groups moving outside the state are quite different from the ones we considered here, the metropolitan-nonmetropolitan interchange does not appear to result in a serious drain of persons of selected characteristics to one area at the expense of the other area. A possible exception is the characteristic of age. The nonmetropolitan part of Wisconsin does have a somewhat older age distribution (the median age is 28.5 years compared with 26.5 years for metropolitan areas), and the pattern of migration we observed is consistent with this differential.

With regard to other characteristics, the interpretation of a net effect due to migration is not clear in any event, particularly since information on these characteristics is for 1970, the end of the time interval. For example, people with white-collar occupations at the place of destination may not have had them at the place of origin. Many younger individuals evidently moved in order to increase their educational status from its level at the place of origin. We found metropolitan areas tended to have higher socioeconomic levels than nonmetropolitan areas, as is generally true, but our pattern of results does not permit us to conclude that this differential is either a cause or a consequence of intercounty migration flows.

All this is not to say that the net impact of migration will be small on any given territory. We would like to have been able to subdivide both metropolitan and nonmetropolitan areas in Wisconsin

since both are quite heterogeneous. A distinction between Milwaukee (now declining in population), its suburban areas, and other SMSAs could indicate more serious net effects due to differential migration patterns. The same might be true of a comparison between nonmetropolitan counties adjacent to SMSAs and those more remote.

Migration concerns many citizens in Wisconsin directly, and it is the major process of population redistribution in the state. Undoubtedly the new contacts, opportunities, and relationships made possible by migration both within and from outside the state have contributed to the dynamic quality of life in Wisconsin. This study has examined the major dimensions of migration affecting metropolitan and nonmetropolitan areas, revealing major differentials in the direction and composition of migration streams. In planning for Wisconsin's future development, the preferences and needs of migrants must be taken into account. Overall, the migration process does not appear to result in significant "drains" in areas losing migrants or serious increases of persons ill-prepared for their new environment in areas gaining migrants. Careful attention should be given, however, to specific subareas of the state currently undergoing rapid growth or sustained decline. There the impacts of differential migration on community services, social relationships, and environmental resources may well be severe.

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Appendix Table A. Cell Frequencies by Migrant Status, Sex and Age, Wisconsin, 1970,[a]

Residence in 1970 and Migration Stream	Males			Females		
	20-24	25-64	65+	20-24	25-64	65+
Metropolitan in 1970						
Nonmigrants	532	4195	838	641	4533	1536
Migrants 1965-70						
Metro to Metro	172	551	28	203	525	152
Nonmetro to Metro	117	229	20	208	203	64
Nonmetropolitan in 1970						
Nonmigrants	347	3079	961	345	3227	1026
Migrants 1965-70						
Nonmetro to Nonmetro	96	263	30	130	235	67
Metro to Nonmetro	99	314	33	115	300	93
Total	1363	8631	1910	1642	9023	2938

[a]The universe is a one in a hundred sample of the 1970 Wisconsin population five years of age and older. Hence, by adding two 00's to any of the cell frequencies, one gets an estimate of the actual Wisconsin population in that cell.

Appendix Table B. Cell Frequencies for Full-Time Workers 25-64 by Migrant Status and Sex, Wisconsin, 1970.[a]

Residence in 1970 and Migration Stream	Males	Females
Metropolitan in 1970		
Nonmigrants	3645	1536
Migrants 1965-70		
Metro to Metro	462	152
Nonmetro to Metro	184	64
Nonmetropolitan in 1970		
Nonmigrants	2605	1026
Migrants 1965-70		
Nonmetro to Nonmetro	217	67
Metro to Nonmetro	229	93
Total	7342	2938

[a]The universe is a one in a hundred sample of the 1970 Wisconsin population five years of age and older. Hence, by adding two 00's to any of the cell frequencies, one gets an estimate of the actual Wisconsin population in that cell.

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